

REMARKS

Claims 1-17, 19, 20, and 22-58 were pending in the present Application.

Claim 27 has been amended and Claims 19 and 29, leaving Claims 1-13 27, 35-47, and 52-58 for consideration in the present amendment.

Reconsideration and allowance of the claims are respectfully requested in view of the following remarks.

Claim Rejection under 35 USC 112

The rejection of Claim 19 under 35 USC 112, second paragraph has been rendered moot in view of the cancellation thereof.

Claim Rejections Under 35 U.S.C. § 103(a)

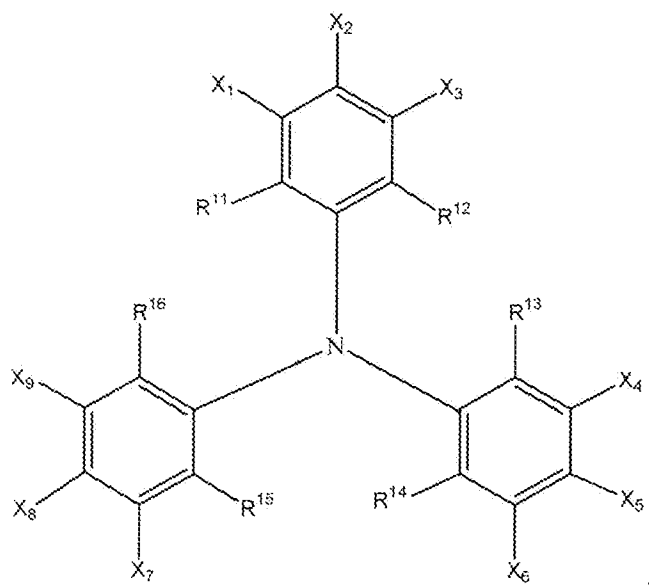
A. Claims 1-6, 8-13, 19, 27, 29, 35-40, 52-55, 57 and 58 stand rejected under 35 U.S.C. § 103(a), as allegedly unpatentable over US Patent Publication No. 2001/0053462A1 to Mishma ("Mishma") in view of US Patent Publication No. 2003/0205696A1 to Thoms ("Thoms") and US Patent Publication No. 2002/0094452 to Ueda et al. ("Ueda"). Applicants respectfully traverse this rejection.

The Office comments that Mishma as well as Thoms fail to teach Applicants claimed aromatic tertiary amines and relies on Ueda commenting that, "Ueda et al. teaches, in analogous art, electroluminescent elements comprising aromatic tertiary amine compounds according to the species under consideration (see general formula V on page 2 and pages 5-18 showing compounds). (see Office Action dated January 22, 2008, page 4, lines 9-12)

However, a compound of general formula V and compounds shown on pages 5-18 of Ueda, which the Office refers to as providing explicit support for its allegation, is different from the triaryl compound as recited in claims 1 and 27.

In the triarylamine compound represented by formula 4-1 or 4-2 as recited in claims 1 and 27, all the ortho positions on the benzene ring to the amino group (herein a phenylamino group) are substituted with hydrogens (i.e., have a hydrogen atom). Ueda's formula V does not teach or suggest these claimed features. Ueda's formula V as described in its application is reproduced below:

Formula V:



wherein R¹¹ through R¹⁶ and X₁ through X₉ are each a hydrogen atom or a substituent, they may be the same or different; and the sum of the steric parameters Es_{R1} through Es_{R16} of R¹¹ through R¹⁶ respectively satisfies the following expression: Es_{R11} + Es_{R12} + Es_{R13} + Es_{R14} + Es_{R15} + Es_{R16} ≤ -2.0. (see Ueda, paragraphs [0018] and [0019])

As shown above, Formula V above does not teach or suggest Applicants claimed features of the triarylamine compounds, since all of R¹¹ through R¹⁶ cannot

simultaneously be hydrogens. When all of R^{11} through R^{16} at the ortho positions on the benzene ring to the amino group are simultaneously hydrogens, the formula is equal to zero: $Es_{R11} + Es_{R12} + Es_{R13} + Es_{R14} + Es_{R15} + Es_{R16} = 0$ (Es Value of hydrogen is 0, see Table 1 in paragraph [0048] on page 3 of Ueda), which does not satisfy the expression requiring the value to be less than or equal to negative 2.0: $Es_{R11} + Es_{R12} + Es_{R13} + Es_{R14} + Es_{R15} + Es_{R16} \leq -2.0$.

Moreover, all of the illustrated compounds on pages 5-18 of Ueda have a substituent other than hydrogen at the ortho positions of the benzene ring to the amino group.

Accordingly, Ueda does not teach or suggest the aromatic tertiary amine compounds according to the species under consideration.

Further, as is apparent from Tables 1 and 2 of Applicant's Specification, organic EL element samples 1-4 through 1-7 each employing a triarylamine compound having a hydrogen atom at all of the ortho positions provided excellent external quantum efficiency and excellent lm/W , as compared to organic EL element sample 1-3 employing a triarylamine compound 1-56 having a methyl group at the ortho position.

In view of the above, it would not have been obvious to one of ordinary skill in the art to attain the subject matter of claims 1 and 27 over Mishima in view of Thoms and Ueda, since Ueda does not teach or suggest the claimed triarylamine compound, and therefore, we believe that Claim 1 and 27, all the claims which depend therefrom, will be in condition for allowability.

In view of the forgoing, the rejection is requested to be withdrawn.

B. Claims 7 and 41 stand rejected under 35 U.S.C. § 103(a), as allegedly unpatentable over Mishima in view of Thoms and Ueda and EP 1667428A2 to Oshiyama et al. ("Oshiyama"). Applicants respectfully traverse this rejection.

As discussed above, the cited references, individually or in combination, fail to teach to suggest Applicants claimed triarylamine compounds. Oshiyama fails to compensate for the deficiencies resulting from the combination of Mishma, Thoms, and Ueda.

In view of the foregoing, the rejection is requested to be withdrawn.

C. Claim 56 stands rejected under 35 U.S.C. § 103(a), as allegedly unpatentable over Mishma in view of Thoms and Ueda in further view of US Patent No. 6,608,748 to Ogo et al. ("Ogo"). Applicants respectfully traverse this rejection.

For reasons discussed above, Mishma, Thoms, and Ueda fail to teach Applicants claimed triarylamine compounds. Ogo fails to compensate for the deficiencies and as such, a prima facie case of obviousness has not been established and the rejection should be withdrawn.

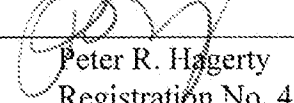
It is believed that the foregoing amendments and remarks fully comply with the Office Action and that the claims herein should now be allowable to Applicants. Accordingly, reconsideration and allowance are requested.

If there are any additional charges with respect to this Amendment or otherwise, please charge them to Deposit Account No. 06-1130.

Respectfully submitted,

CANTOR COLBURN LLP

Date: April 4, 2008
CANTOR COLBURN, LLP
1180 Peachtree Street, Suite 2050
Atlanta, GA 30309
Telephone (404) 607-9991
Facsimile (404) 607-9981
Customer No.: 23413

By 
Peter R. Hagerty
Registration No. 42,618